



# A-GRAM



AIR FORCE CIVIL ENGINEER SUPPORT AGENCY

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## DESIGN GUIDE FOR MILITARY FAMILY HOUSING (MFH), ENERGY-EFFICIENT REVITALIZATION AND NEW CONSTRUCTION

### SYNOPSIS:

This supersedes A-Gram 97-20, dated May 1997.

As the Air Force upgrades existing family housing through new construction and revitalization, the goal is to meet future housing needs and to provide housing quality comparable to what is available in the private sector. Efforts to upgrade family housing also create opportunities to improve the energy efficiency of these units. The Air Force has developed a guidebook to address energy efficiency in family housing and help meet reductions in energy consumption mandated by the Energy Policy Act of 1992.

### PURPOSE:

This design guide was prepared for architectural and engineering (A&E) firms commissioned to develop new construction and revitalization plans for MFH. The design engineer and A&E firms will find all the necessary information as well as analytical tools that will enable the designer to make prudent and cost-effective decisions regarding the type and extent of energy-efficient measures to be implemented during new construction, or as part of the revitalization process.

### HOW TO USE THE GUIDE:

The guide is divided into sections to help expedite the design and energy interface. A&Es should be required to use this design guide for MFH projects.

The guide provides:

- step-by-step procedures for analyzing and selecting energy conservation measures
- detailed diagnostic inspection procedures that will identify energy-efficiency problem areas in existing housing
- selected specifications for material and equipment installation

### ADDITIONAL DESIGN GUIDES:

Two follow-on design guides, Retrofit/Weatherization Guide (distributed Feb 97) and a Housing

Energy Efficiency Inspection Field Manual (distributed Dec 97) complete the MFH design guide program.

### DISTRIBUTION:

The design guide was distributed to MAJCOMs and bases in Sep 96. This design guide is also located on the Construction Criteria Base CD-ROM.

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